

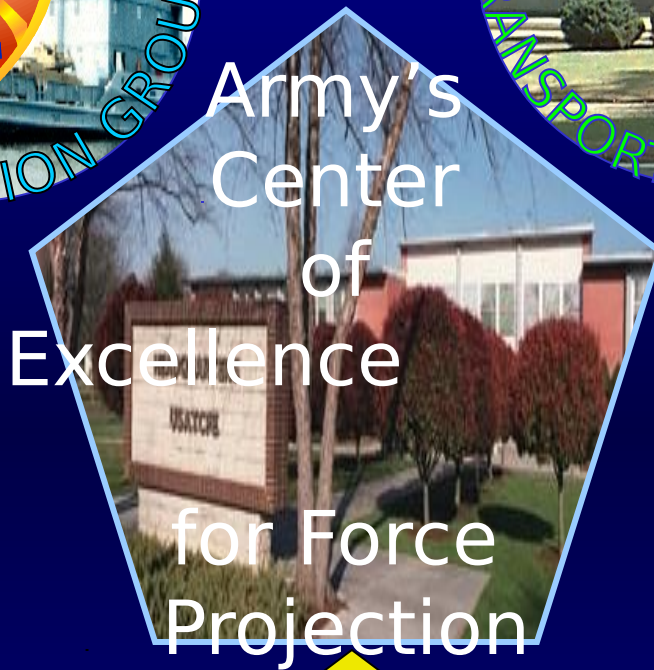
# FORCE PROJECTION

*(Fort to Foxhole)*



Deployment Process Modernization Office





*Fort Eustis, VA*



# Deployment Process Modernization Office



## DSCLOG/DCSOPS Chartered

### DOCTRINE & FUTURES DOCTRINE

- FM 100-17  
SERIES
- FM 100-5
- ATWG
- AIT Doctrine
- ASB

### OPERATIONS & TRAINING

#### FORCE PROJECTION TRAINING

- Deployment Excellence  
Award
- BCTP
- CALL TEAM SPT

### INFORMATION FUSION TC-AIMS II & JFRG II

- ARMY  
REQUIREMENTS
- BETA TESTING
- TRAINING
- REQ.  
DOCUMENTATION

### FORCE PROJECTION BATTLE LAB SUPPORT ELEMENT MODELING & SIMULATION

- IBCT Analysis
- IDIV Analysis
- ATWG modeling

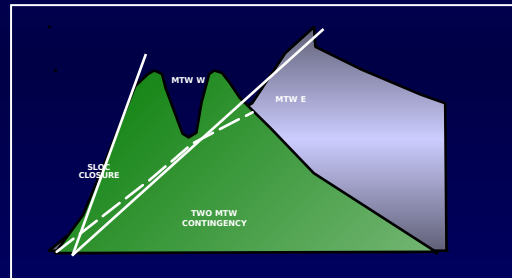
ELIST  
JFAST



# Where we are today ...legacy force

Based on MTW requirements

**MRS BURU (93-96)**  
Requirements  
5 1/3 Divisions  
1 Corps  
CSS

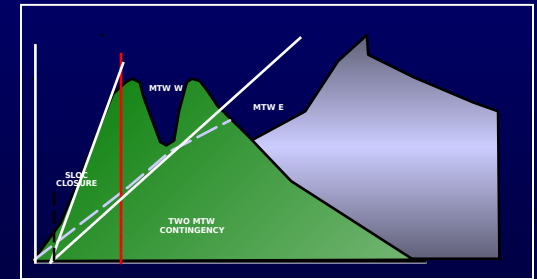


**5 DIVs / 75 days**

## Results

|                      |    |
|----------------------|----|
| LMSR 19 (20)         | 11 |
| C-17s 120 (134)      | 65 |
| Prepo 7 BDEs (8)     |    |
| CONUS Infrastructure |    |

**MRS-05 (99-00)**  
Requirements  
5 1/3 Divisions  
2 Corps  
CSS  
SOF  
Intra-theater Lift



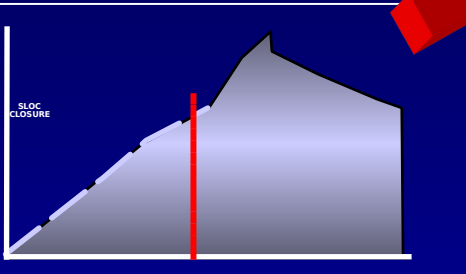
**5 DIVs / 75 days**

## Emerging Results

**C-17 +  
Containerization +  
Army Watercraft Fwd Station  
Intra-Theater Lift  
CONUS/OCONUS Infrastructure**

**Vast improvements  
since Desert Storm**

**DESERT STORM (90-91)**




**5 DIVs / 150 Days**



*The Nation remains globally engaged  
to protect and promote US vital  
interests*

Land forces provide the Nation the full  
range of options for shaping the world  
environment



***During the period 1950  
- 1989 the Nation  
required 10 major  
deployments...***

***Since 1990, major  
deployments have  
increased to 44 --***

*And soldiers  
are  
remaining  
deployed to  
preserve the  
peace  
longer than  
ever before*

***“Peace is not only better  
than war,  
but infinitely more***

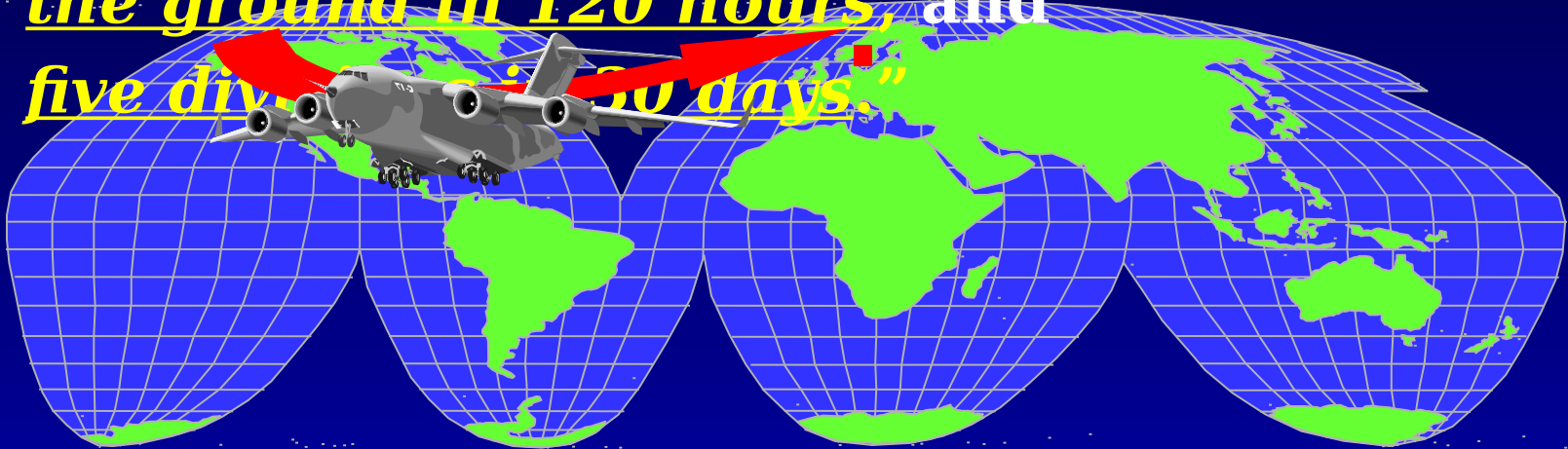
# Army Vision



“With the right technological solutions ... allow us to put a combat capable brigade anywhere in the world in 96 hours after lift-off, a division on the ground in 120 hours, and five divisions in 30 days.”



General Shinseki





# Force Projection Today



# Force Projection Tomorrow



**Requirement for Both in 2010 - 2020**

# Strategic Maneuver



- LIMITED SITUATIONAL AWARENESS
- CUMBERSOME ANALYSIS
- INCREMENTAL BUILD OF COMBAT POWER
- SEQUENTIAL

## Army Transformation

- STATIONARY RISK
- STRATEGIC SURPRISE UNLIKELY
- SUPPLY-BASED LOGISTICS
- LARGE MEDIUM ROLL-ON / ROLL-OFF SHIPS, C-17s, C-5s

- NEARLY TOTAL SITUATIONAL AWARENESS
- IMMEDIATE ANALYSIS
- IMMEDIATE COMBAT POWER
- SEAMLESS

- DISPERSED
- STRATEGIC SURPRISE / PRECLUSION POSSIBLE
- TRANSPORTATION-BASED LOGISTICS
- SHALLOW DRAFT HIGH SPEED SHIPS, ADVANCED THEATER TRANSPORT, THEATER SUPPORT VESSEL...



# Formula for Success

- Lighter, Smaller, Less
- Fuel Efficient Engines
- Tailorable Organizations
- “Smart Munitions”
- Diagnostics

- Intermediate Staging Bases?
- Prepositioning?

**Transforming Army Requirements =  $\frac{(\text{Requirements})}{(\text{Capabilities})} * (\text{Distance})$**

- Agile and Flexible Strategic and Theater Lift
- Information Superiority
- Tailorable Force Structure
- Intermodalism



# *Joint Infrastructure Working Group (JIWG)*

## Concept of Operation



### Joint Infrastruct ure Working



#### PURPOSE

Support for Army Transformation Vision

#### SCOPE

- Joint Physical Infrastructure

- Deployment C2

#### BACKGROUND

- MRS BURU: Army Strategic Mobility Program = \$5 Billion

- PPP Infrastructure Improvements

#### OBJECTIVES

- Develop Transformation Infrastructure Blueprints

- Leverage Existing Capabilities

- Identify Required Improvements

- Army Power Projection Program 3 (AP3)

**POINT: Cooperative Effort to Synchronize Service and Joint**



# JIWG Site Visit Matrix

- Airfield Facilities
- Command & Control (C4I)
- Alert Holding Area (AHA)
- A/DACG Facilities
- Troop Terminal
- Ammo Supply Point
- Contingency Pallet Warehouse
- Distance to APOE
- RF/AIT



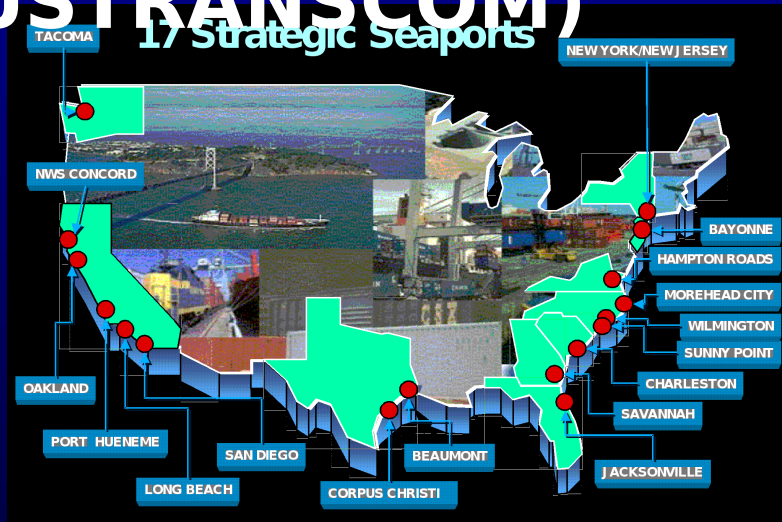
# 15 Force Projection

ms

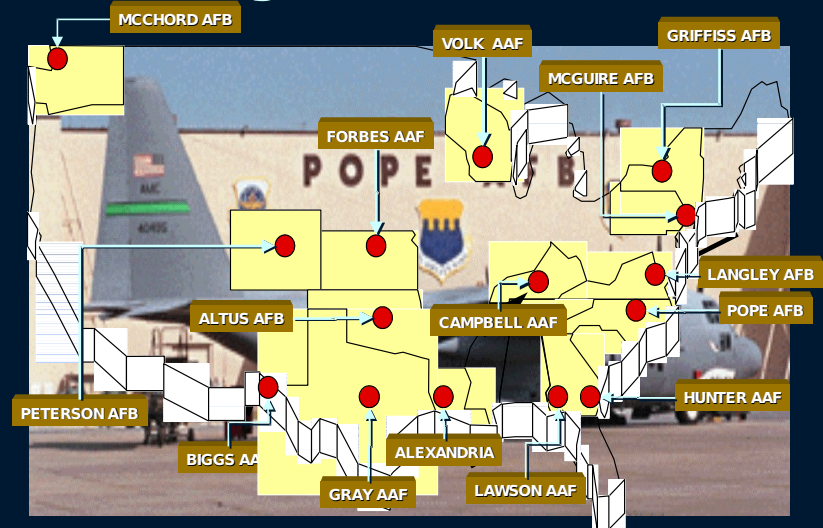




# US Transportation Command (USTRANSCOM)



## 15 Strategic Aerial Ports



# Four Segments of Deployment

## PREDEPLOYMENT ACTIVITIES



## FORT TO PORT



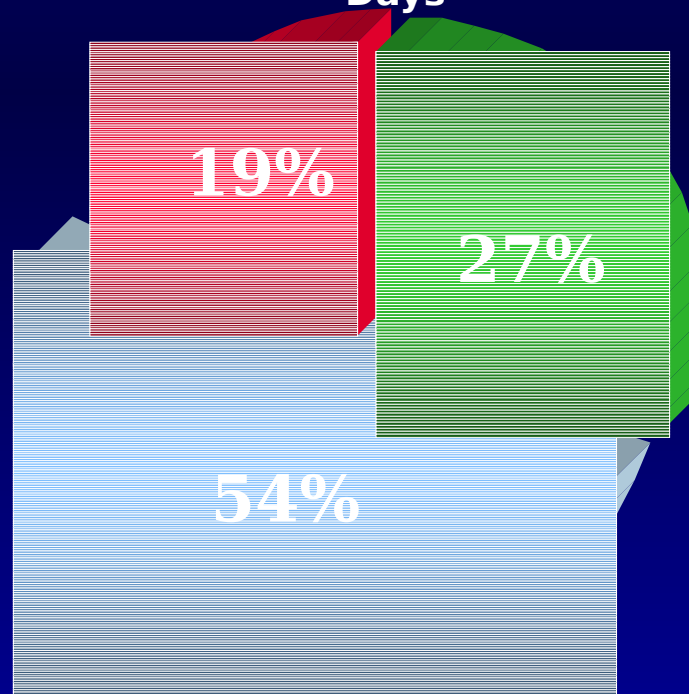
## PORT TO PORT



## PORT TO FOXHOLE (RSO&I)



# Fort to Fight Timeline - Best Case Today



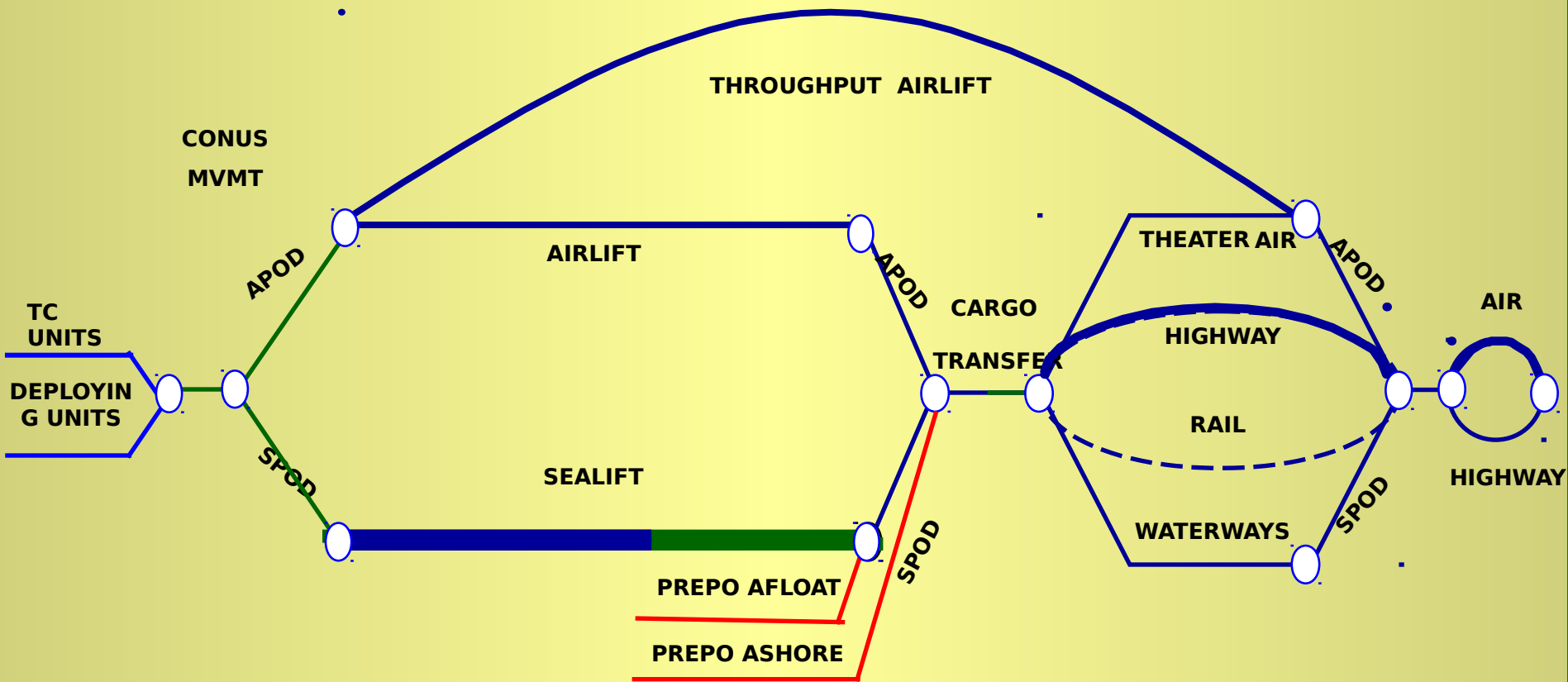
Land Movement

Strategic Movement

Load/Discharge



# Building the Theater



Fort To Port

Port to Port

Port to TAA

**FRICTION POINTS**



SECRET NOFORN

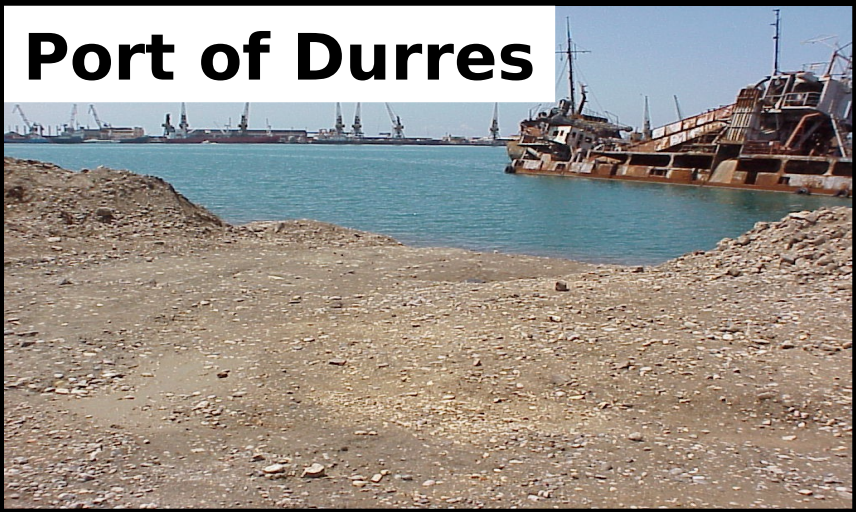
Salzburg

Budapest

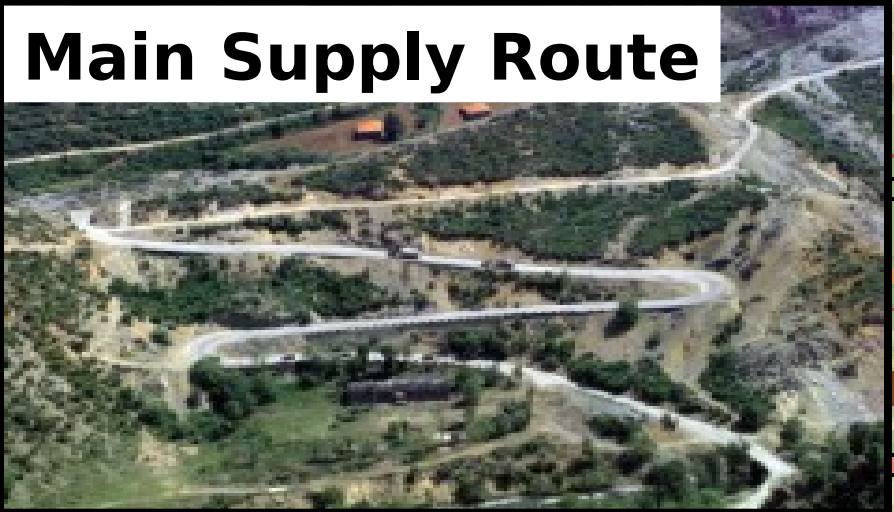
Cluj-Napoca

**Area of Operations**

**Port of Durrës**



**Main Supply Route**



**Kukes Airport**



**Tirana Rinas Airport**



**POINT: Difficult To Get To, Difficult Once There!**



**MOG** is the maximum number of aircraft on the ground that can land, taxi-in, park, be unloaded, refueled, maintained, inspected, taxi-out, be cleared for departure, and takeoff within a planned time interval.

- physical space
- processing the aircraft (from landing to takeoff)



# APOD / SPOD Challenges

- **Security**
- **Unity of Command**
- **Prioritization Process**
- **In-Transit Visibility (ITV)**
- **Clearance Capability**
- **Life Support**



**To Produce  
Combat  
Power**

# Speed: World Class Airport

## Flight Data

Fire crew  
18

Security force 27

Fuel handlers 49

Baggage handlers 239

Air traffic controllers  
22

Flight line  
495

Per shift  
85

## Plane Data

Inbound Cargo 300

Inbound Passenger  
900

Outbound Cargo 300

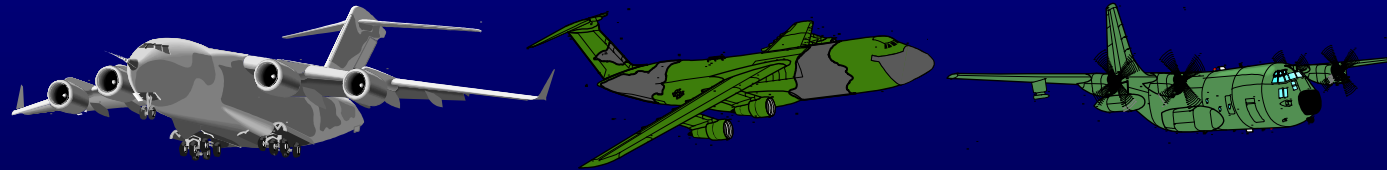
Outbound Passenger  
900

2400

(plane every 36  
seconds)



# Deployment Overview: Lift Characteristics



|                     | C17        | C5         | C-130      |
|---------------------|------------|------------|------------|
| Average Airspeed    | 450 Knots  | 450 Knots  | 300 Knots  |
| Pax Load*           | 12 (Avg)   | 36 (Avg)   | 0 / 92     |
| Avg Cargo Payload * | 49         | 66         | 15.7 / 0   |
| Avg Load Times      | 2.25 hours | 4 hours    | 1.5 hours  |
| Avg Off-load Times  | 2.25 hours | 3.25 hours | 1.5 hours  |
| Avg Range Loaded *  | 8.5 hours  | 8.5 hours  | 10.5 hours |

**Based on data provided by USTRANSCOM using the MASS model**



# Deployment Overview: Lift Priorities



- 1A1 President
- 1A2 Forces In Combat
- 1A3 Presidential Program
- 1A4 Special Weapons

- 1B1 Secretary of Defense Missions  
**CONTINGENCY OPERATIONS**

- 1B2 JCS
- 1B3 Validated Min. Freq. Channel
- 2A1 Combat Support
- 
- 2B1 JCS-Directed Exercises
- 2B2 JCS-Coordinated Exercise
- 
- 
- 

**YOUR SUSTAINMENT**

CL IX, ETC.

- 3A3 Approved Reqmts. Channels
- 
- 
- 
- 
- 4B3 Static Display

POINT: DEPLOYERS AND SUSTAINMENT  
COMPETE FOR LIMITED AIRLIFT !!

# Army's Four Part Strategy to Improve Force Projection:

## Doctrine

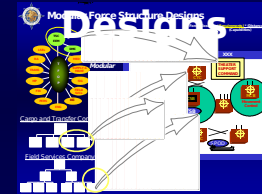


## Theater Support Command

COMMANDER



## Modular Force Structure

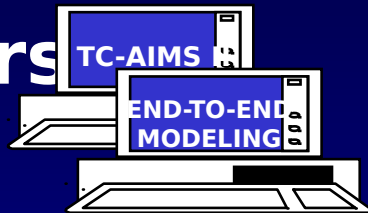


## Force Requirements

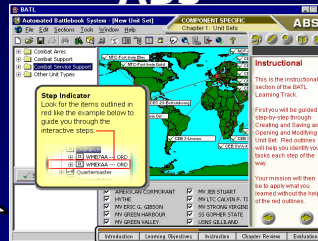


## Force Structure

## Enablers



ABS



TS



## Exercises/Deployments



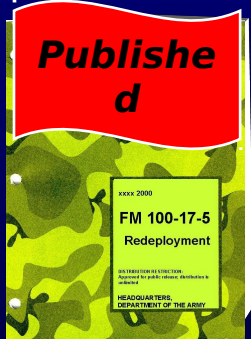
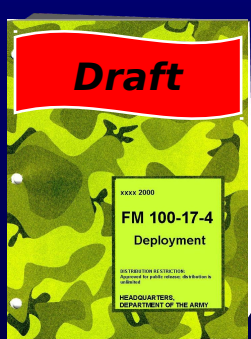
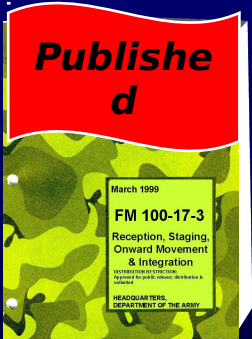
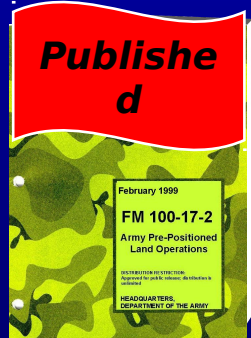
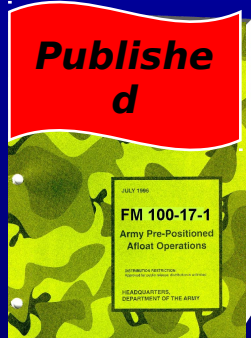
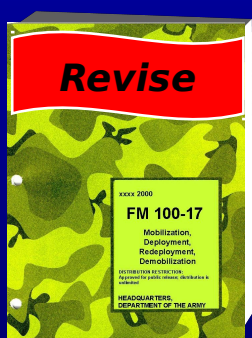
## CSA Deployment Excellence Award



## BCTP



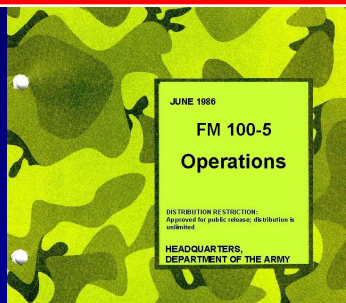
## Training



# Force Projection Doctrine

- Intellectual cornerstone to enable commanders to deploy effectively and efficiently
- Complementary to Army Vision

## Chapter 3 “Strategic Responsiveness”



## FM 3-0 Operations

- Framework for Strategic Responsiveness
- Inextricable Link Between

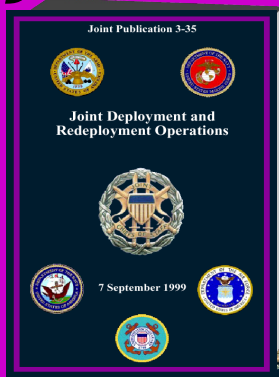
Deployment and Employment



# Joint Doctrine

## Joint Doctrine

**JP 3-35**



Reception, Staging, Onward Movement & Integration

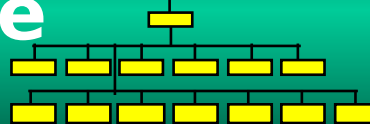
**JRSOI**

## Family of Force Projection Doctrine



- **Provide Specific Service Guidance Within the Framework of Joint Operations**
- **Emphasize Joint Impact and Optimize Joint Effects**

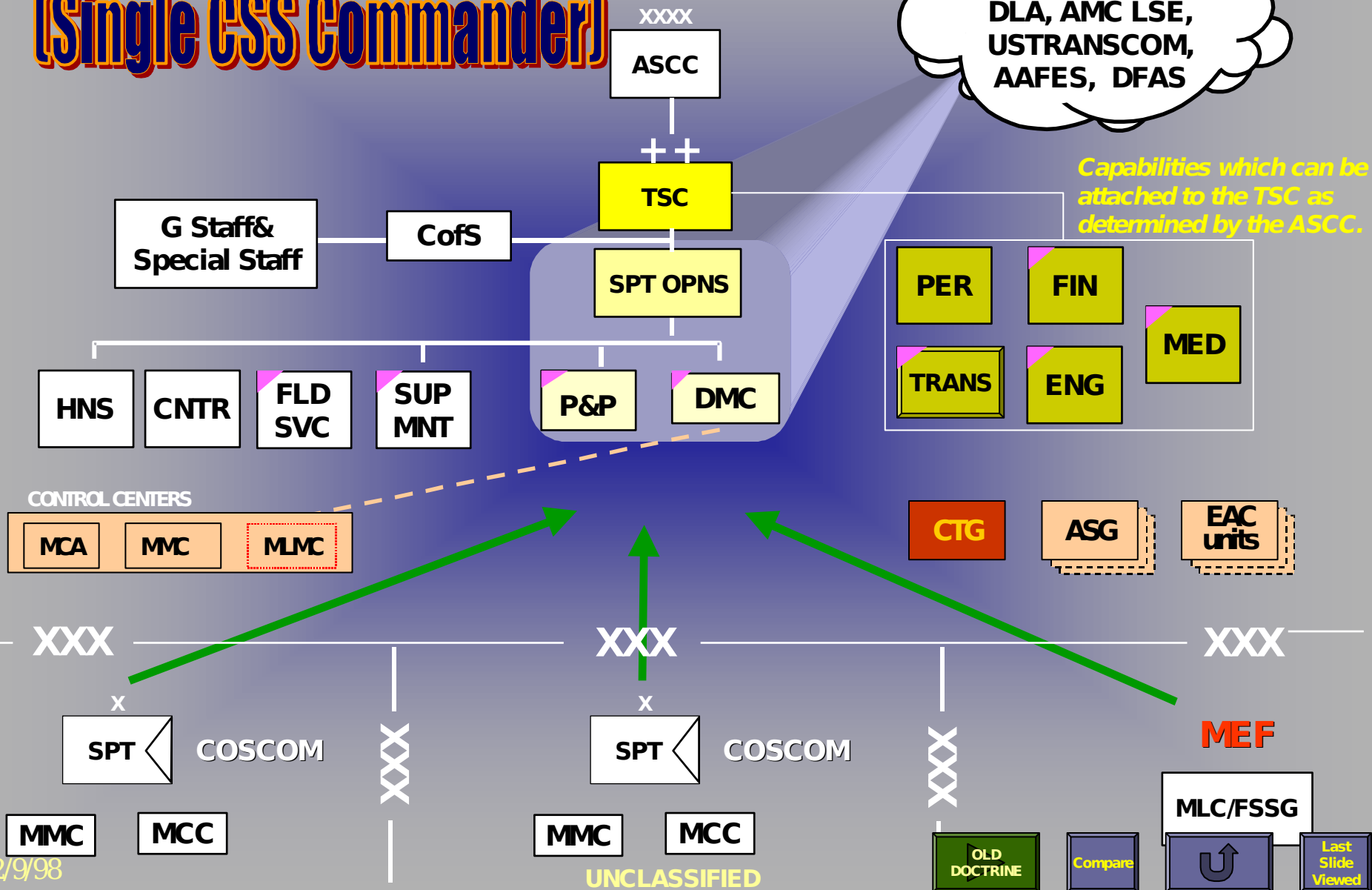
# Doctrine



# Enablers



# Theater Support Command (Single CSS Commander)

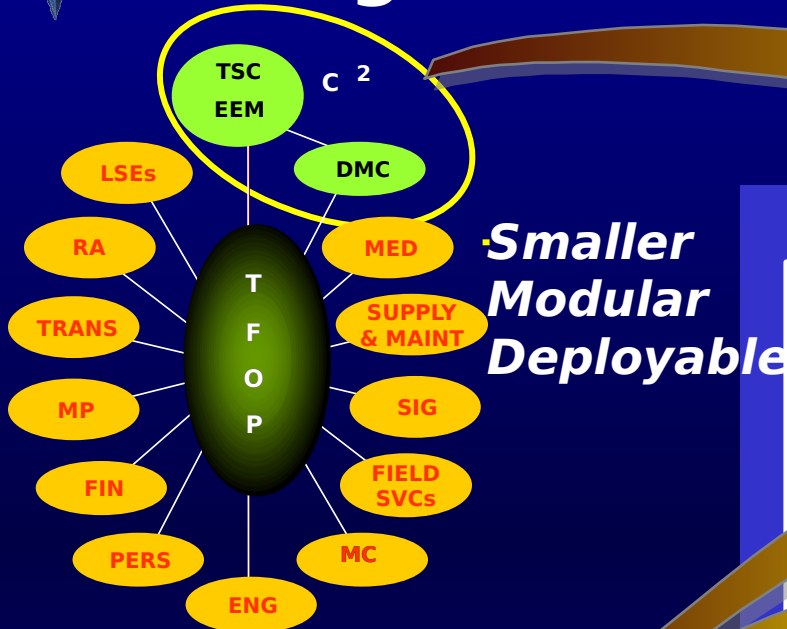




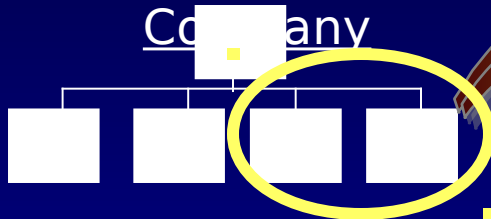


# Modular Force Structure Designs

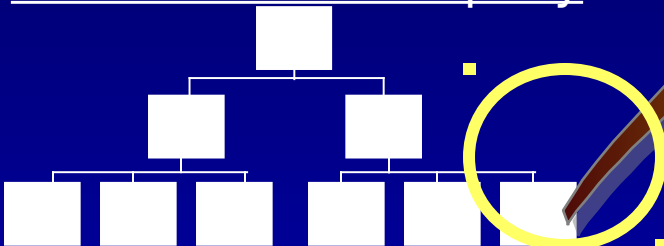
Force Closure = Requirements \* (Distance / Capabilities)



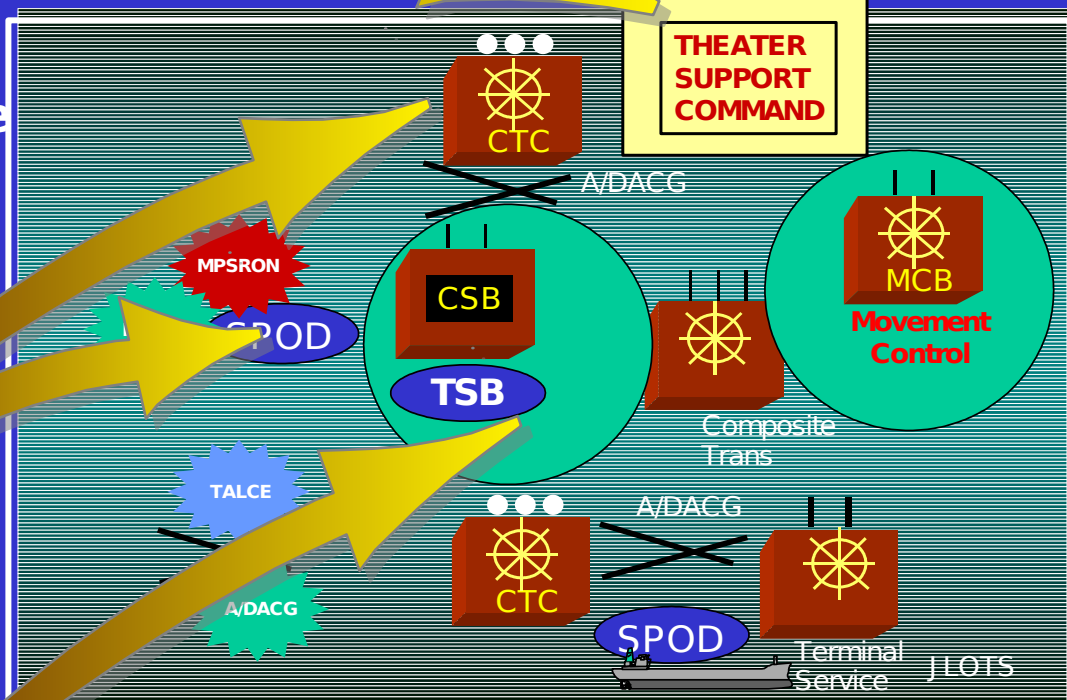
Cargo and Transfer Company



Field Services Company



## MODULAR UNITS



# Army Enabler - Cargo Transfer Company



Airfield (Arrival/Departure)



Rough Terrain Cargo Handler (RTCH)



Seaport (Ship Ro-Ro)



Seaport (Ship Lo-Lo)



Railhead Ops



Logistics-Over-the-Shore



# Force Requirements Analysis

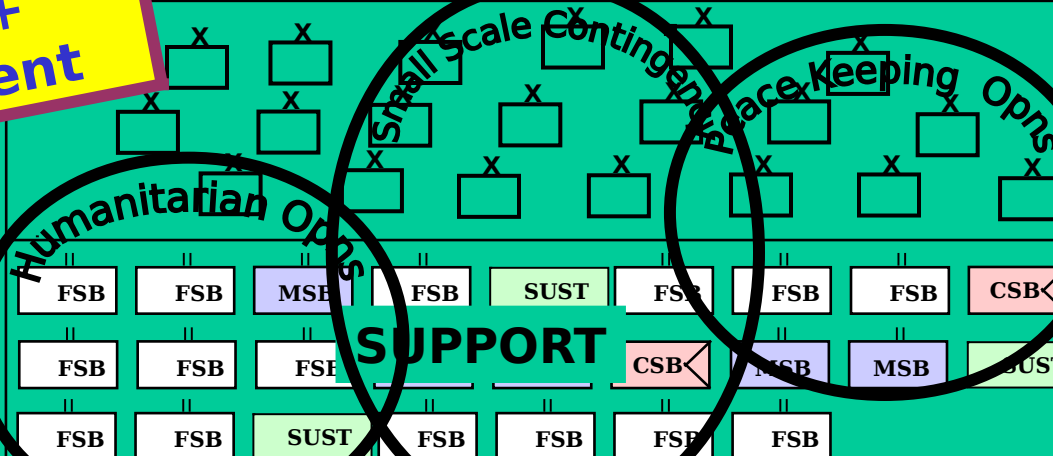
5 Divisions in  
30 Days....& Cbt  
Svc Spt +  
Sustainment

C+30

Effective  
Power

“TO BE”

Issue: What are the  
relationships / rules  
between the above  
and below the line  
forces in a given  
time block;  
between time  
blocks: How are  
these scored?



## Spectrum of Military Operations



**POINT: Future Planning Must  
Rapidly Measure Capabilities**





# Force Structure

Force Closure =  $\frac{\text{(Requirements)}}{\text{(Capabilities)}} * \text{(Distance)}$

## Deployable

### AOE / Force 21



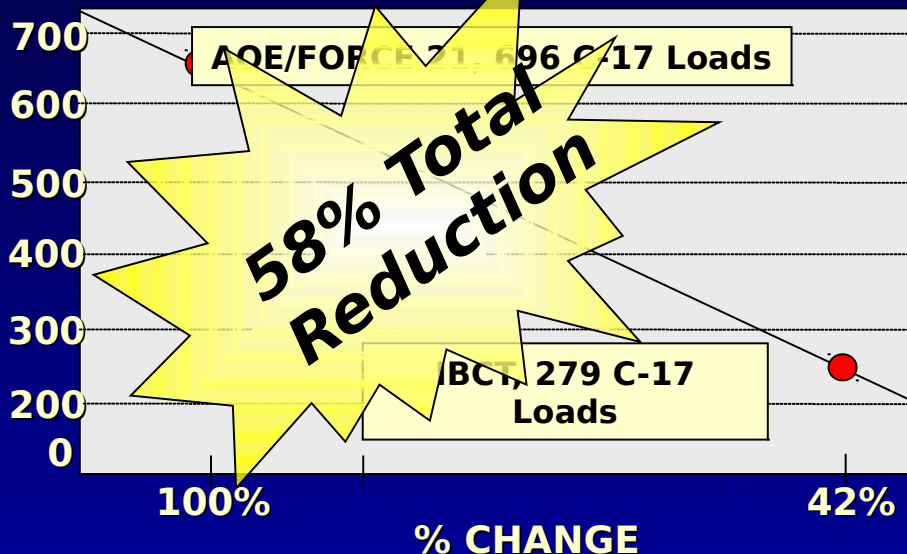
### IBCT



**Faster  
Lighter and  
Reduced  
RSO&I**

### C-17 Loads

## Deployable



**Lethal, Lighter, Faster**

# Key Performance Parameters

## IAV/C130

### IAV

### Requirements:

- Must enter and exit aircraft capable of immediate combat operations (Does not require a full basic load)
- Does not exceed 13,000 lbs max axle weight on the treadways
- Combat capable deployment weight must not exceed 38,000 lbs GVW (19 STs)
- < 38,000 lbs GVW allows C-130 transport of 1,000 nautical miles without requiring a USAF waiver for maximum aircraft weight on fixed runway



### *Possible IAVs*

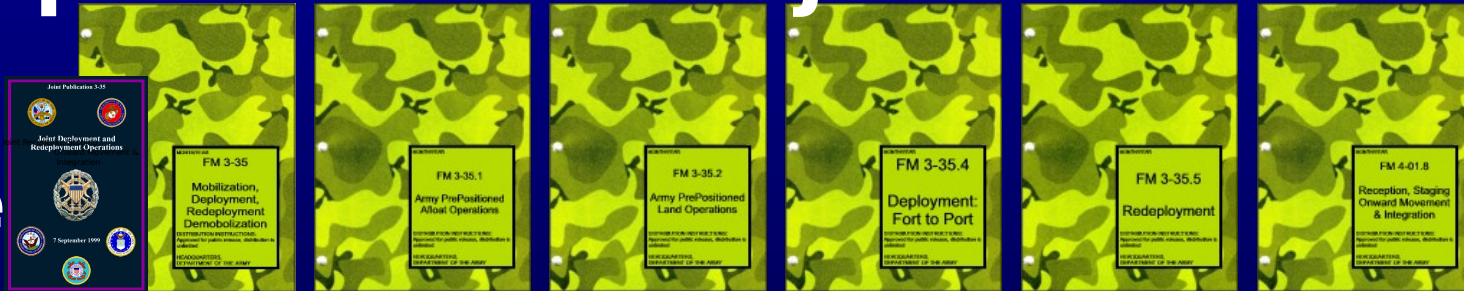


### *C130*

**POINT: C-130 with IAV Must Be Capable of Assault Strip Landing with a Waiver**

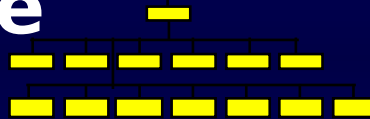
# Army's Four Part Strategy to Improve Force Projection:

## Doctrine

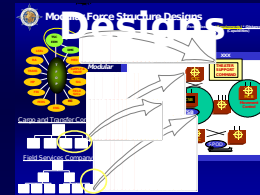


## Theater Support Command

COMMANDER



## Modular Force Structure

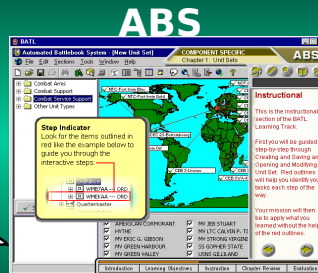
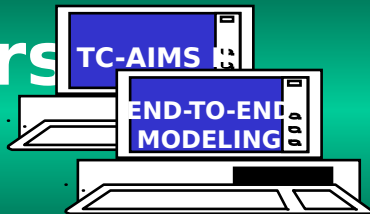


## Force Requirements



## Force Structure

## Enablers



## Exercises/ Deployments



## CSA Deployment Excellence Award



## BCTP



## Training

# TC-AIMS II

**Joint**

**In-Transit  
Visibility**

**Army  
Lead**

**Force  
Projection**

**TC-AIMS  
TC-ACCIS  
DAMMS-R  
Functionality**

**Movement Planning  
Movement Control**





# TC-AIMS II



Provides Commander's Visability

ADDS

Improved Automated Planning

Automated Blueprint

Decision Tool

Faster Response Time

## Provides Units

- Deployment Equipment List
- Load Planning
- Cargo Manifesting
- Personnel Manifesting
- Movement Clearance



## Interfaces To

- Global Transportation Network (GTN)

- CONUS Movement Systems

- Strategic Lift Systems

- Joint Operations Planning & Execution System (JOPES)

- Deployable Automation

- Flows thru Chain of Command

- Electronic Interfaces

- Rapid Response in Planning/Sourcing

- Accurate Deployment Data

- Supports Concurrent Planning

**Single DoD System Supporting all Unit and Installation Deployment**

# AUTOMATED BATTLEBOOK SYSTEM (ABS)

**ABS updated Quarterly on CD-ROM**

**Computer Based Training (CBT) being added to ABS to simplify training & increase usability**

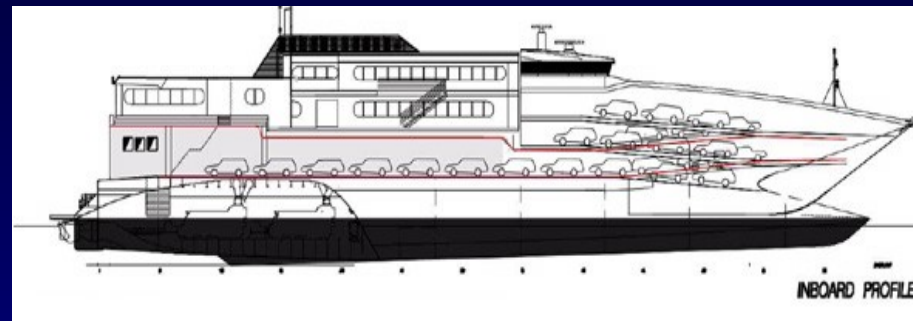
**BattleWeb will bring ABS to the worldwide web allowing the warfighter to obtain up-to-the-minute data on equipment status**  
**<http://www.battlebooks.com/>**

# Theater Support Vessel



1 Sailing delivers 4.5 C5  
or 6 C17 equivalent  
loads

**Displacement** 250 Long Tons (835 lightship)  
**Length** 284 feet  
**Beam** 85.2 feet (overall) 14.2 feet (hulls)  
**Draft** 11.8 feet



## Capabilities:

**Max Sustained Speed** 43 Knots

**Capabilities** 600 Troops with Gear + 200 Commercial sized cars

**Range** 1000 Nautical Miles fully loaded.

**Loading/Discharge** two 12 meter access ramps to facilitate stern loading

**Berth Discharge Rates** < 1 Hour

**In-Stream discharge performed in Dili, East Timor**



**Potential HSS  
Lease  
Candidate**

# 96 Meter Layout

## Capabilities

- 350-600 Soldiers
- 600-1000 STONs
- 1000-1200 NM Range
- 40+ Knots

### Lease Partners

U.S. Army



U.S. Navy



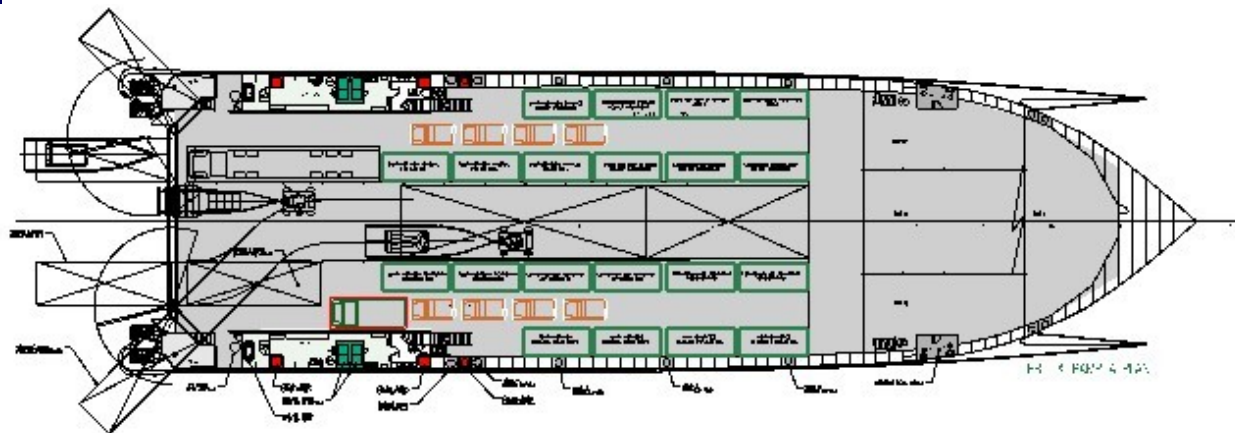
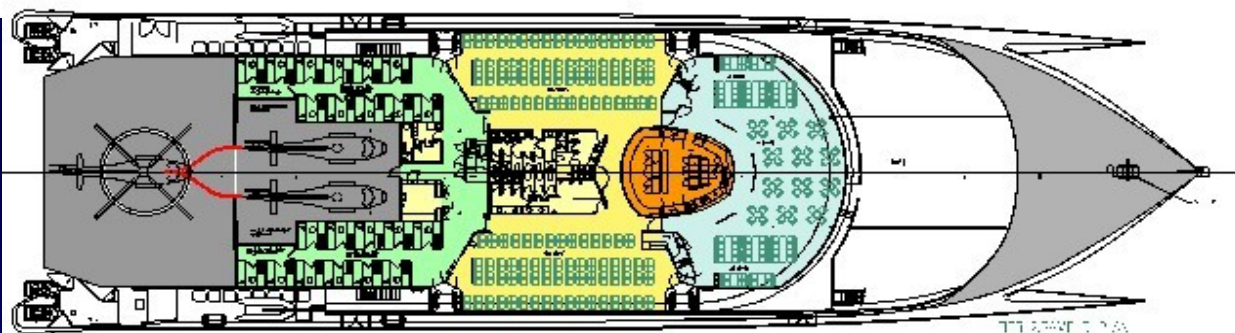
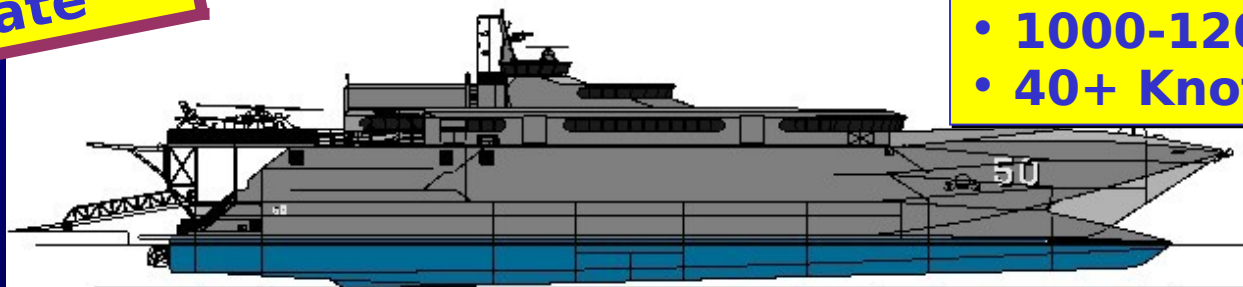
U.S. M.C.



U.S. TRANSCOM



U.S. C.G.

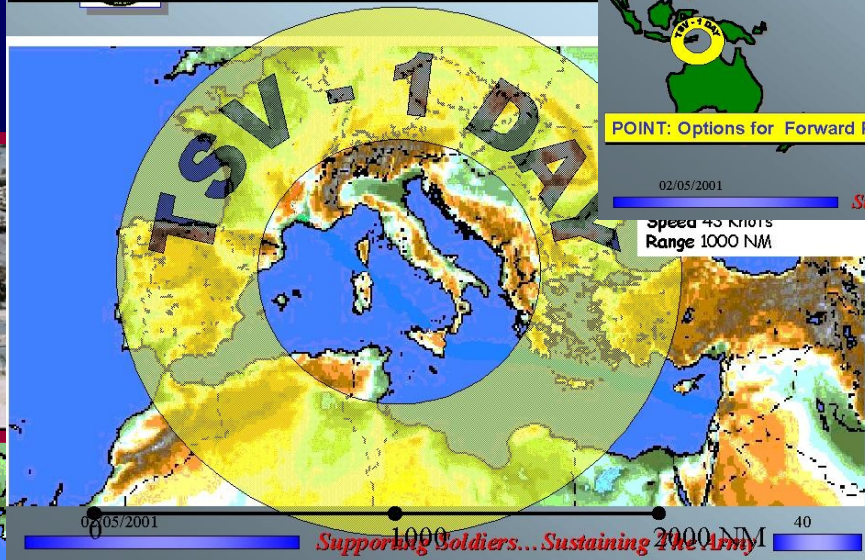




# Possible PREPO Strategy

## PREPO ASHORE

### 1 Day Range Options for Forward Positioning



### Future Theater Support Vessel (TSV)

Future Capability?

- High Speed (40+ Knots)
- Shallow Draft
- Cargo Weight Constraints



POINT: Options for Forward Positioned High Speed TSVs with 24 hour Range

**Point: Prepositioning can be more responsive with f**

# Possible PREPO Strategy



**Point: TSV + PREPO AFLOAT Provides Increased Responsiveness**

not necessarily authoritative.

# Short Range Intra-theater Scenario

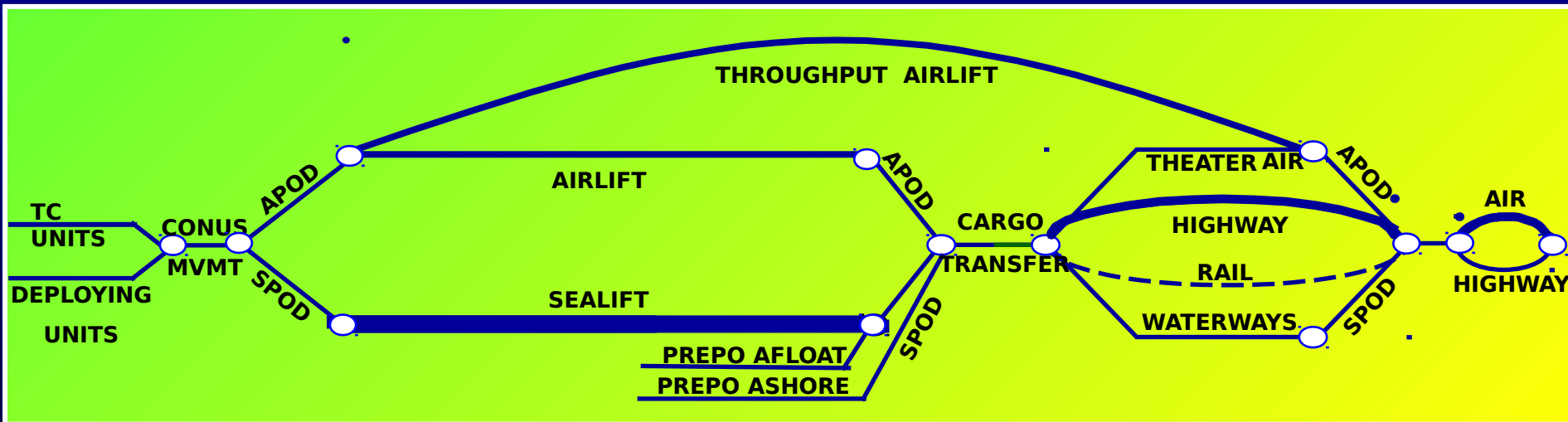
## Sicily to Albania



| Mode            | C130       | C130      | C17        | TSV        | TSV         |
|-----------------|------------|-----------|------------|------------|-------------|
| Port Capability | MOG 3      | MOG 6     | MOG 2      | 9300MT/Day | 18600MT/Day |
| Intra-theater   | 15.68 Days | 7.88 Days | 12.23 Days | 4.57 Days  | 2.56 Days   |



# Strategic Agility



## CONUS

### Dependent

C-5  
Civil Reserve Air Fleet  
Large Medium Speed  
Roll-on/Roll-off  
Fast Sealift Ships  
Ready Reserve Force  
Voluntary Intermodal  
Sealift Agreement

## ISB

### Semi-Dependent

C-17  
C-130  
SSTOL  
SkyCat  
CargoLifter

## BATTLESPACE

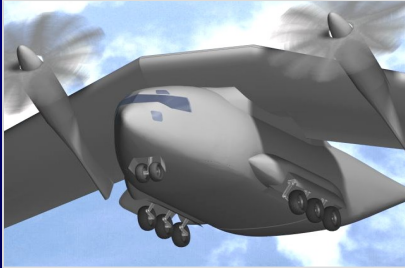
### Independent

Joint Transport  
Rotocraft  
Shallow Draft HSS



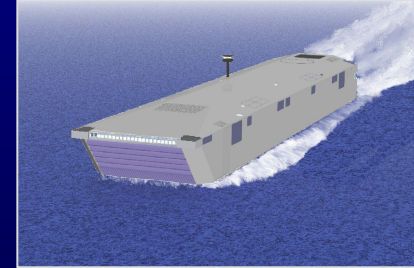
# 2015 Technology

Super Short  
Take Off and Landing



(Advanced Theater  
Transport)  
Two Future Combat Systems  
3K Nautical Miles  
750 Foot Runway

Shallow Draft High Speed  
Ship



55 KT  
Three ships deliver Interim  
Brigade Combat Team  
intact

Joint Transport Rotorcraft



One Future Combat System  
2K Nautical Miles

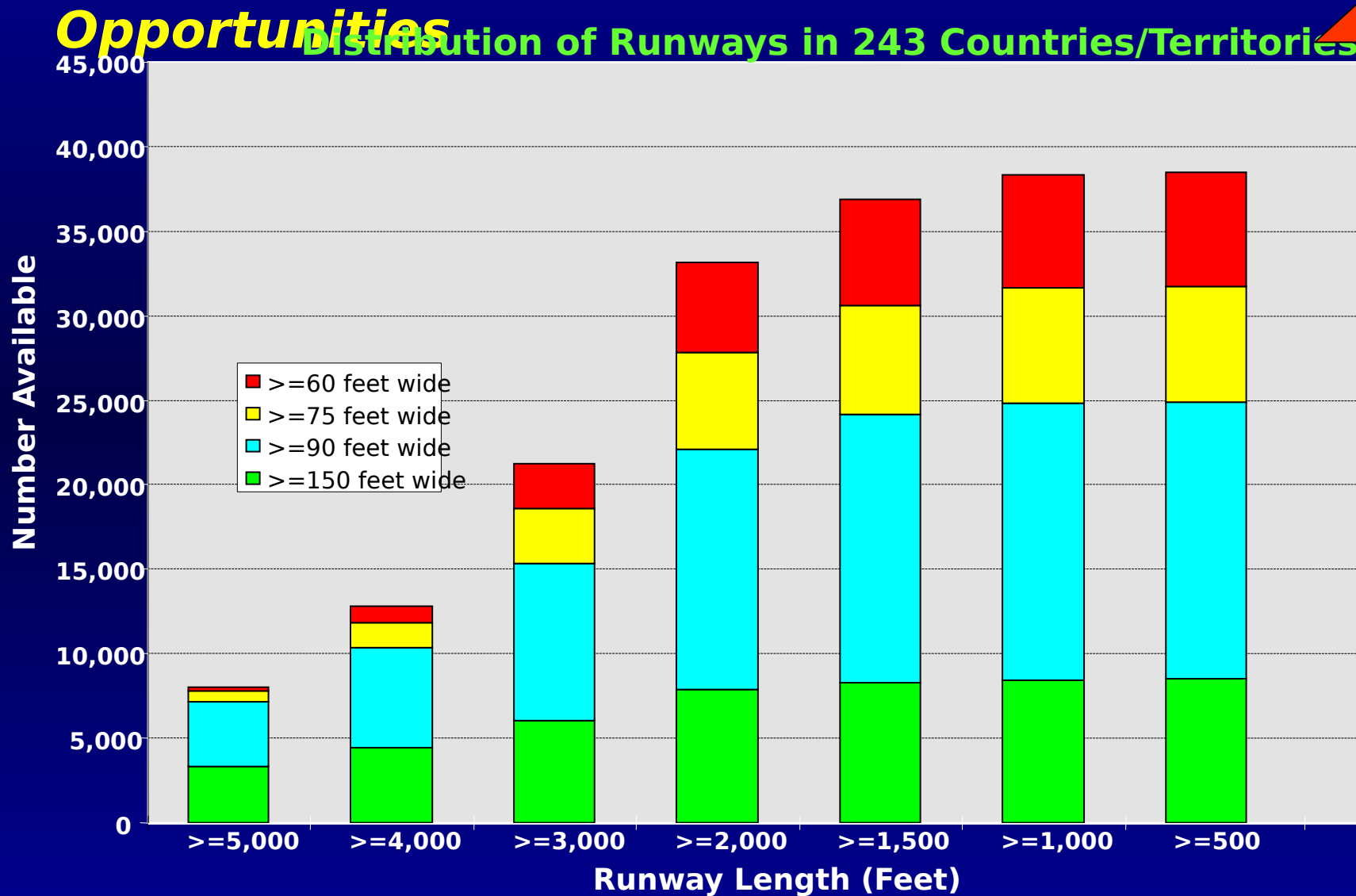
Theater Support Vessel



12 Theater Support Vessel  
sorties deliver Interim Brigade  
Combat Team intact 400  
Nautical Miles

# Advanced Theater Transport (ATT) and Joint Transport Rotocraft (JTR) Runway Opportunities

**ATT / JTR  
Landing  
Sites**



**POINT: ATT and JTR landing sites are “off the chart”**

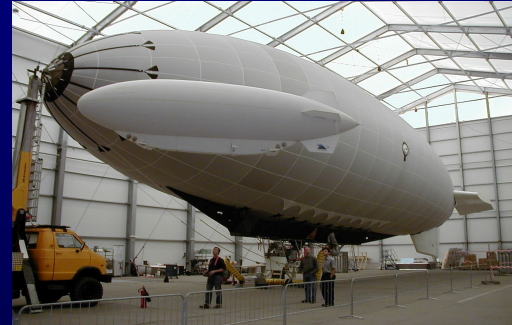
# Tomorrow's Technologies

## ***SkyCat***



***100KTs / 1000 STs  
600'by4,000'***

## ***Cargolifter***



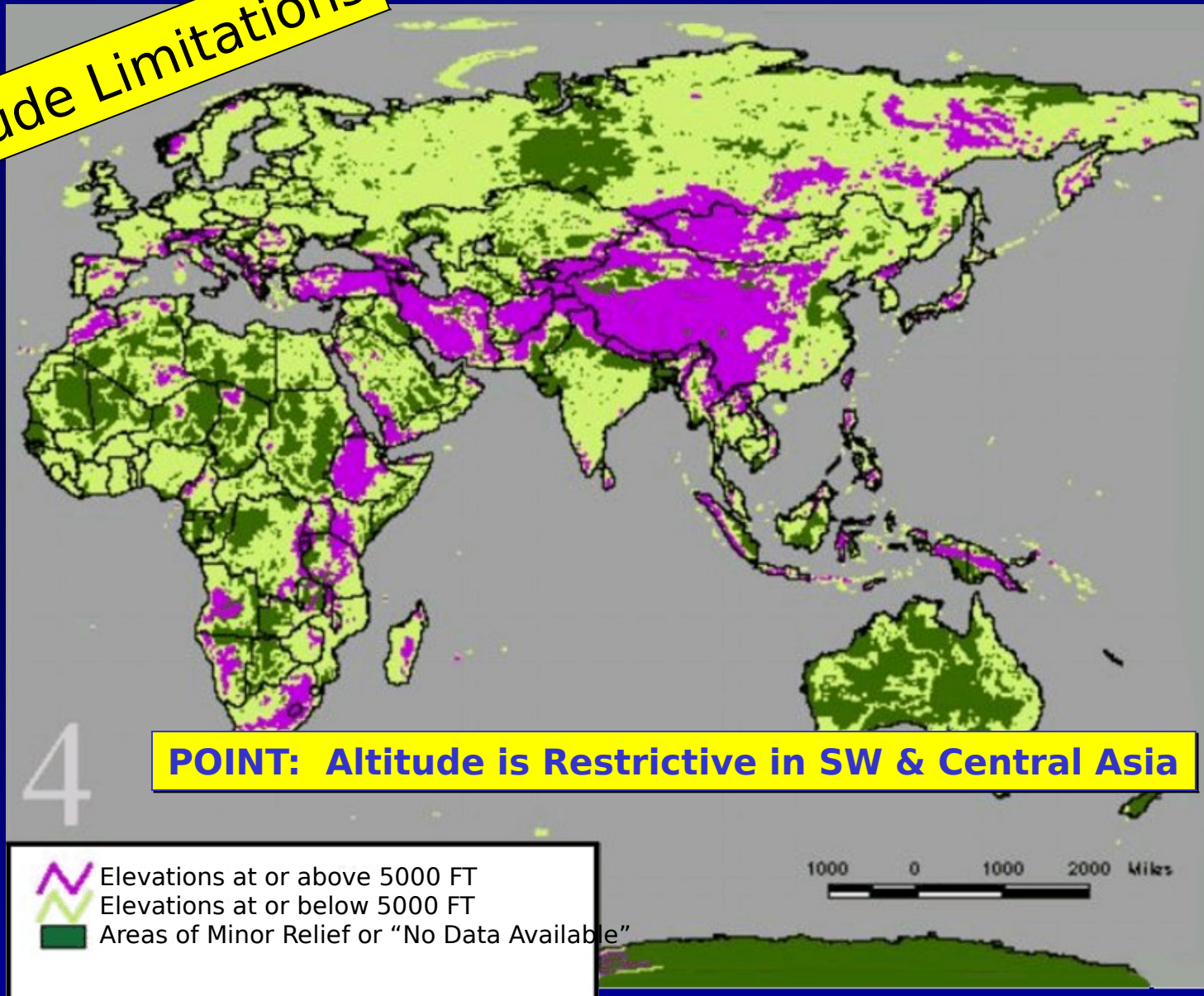
***60 Kts/160 STs  
400'by400'***

## ***Boeing Ultra Heavy Lifter***



# Worldwide Elevations

Altitude Limitations





# Doctrine



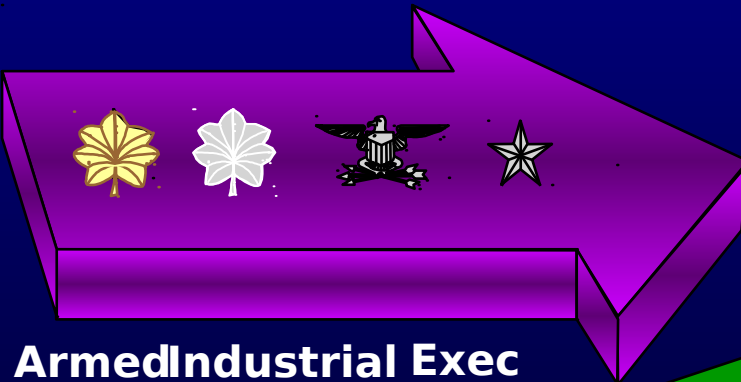
## Exercises/ Deployments



# Individual Training

## Force Projection

Power  
Projection  
Force



Armed Forces College  
Staff College  
College of Defense Forces

Industrial Exec  
College of the  
Staff to  
College of Defense Forces

Intro to  
Defense Trans

Joint  
Education

Army  
Education



GS 9

Transportation Officer Basic Course

GS 11 Combined Logistics Officer  
Advanced Course

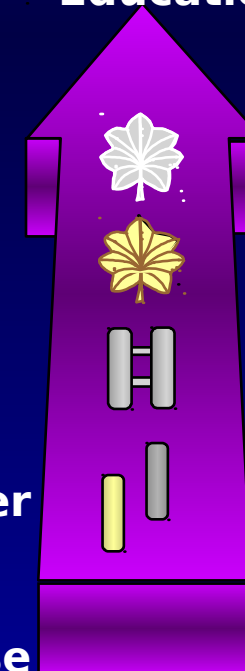
GS 12 Command and  
General Staff  
College

GS13

Army War  
College

GS14

Functional  
Education



Strategic  
Deployment  
Planning Cour

Intro Defense  
Trans

Unit Mvmt  
Officers Cours

# Mobility Warrant Office



- 46 AC Positions

- 62 RC Positions

Unit  
Move  
Operations



Air  
Deployment  
Planning



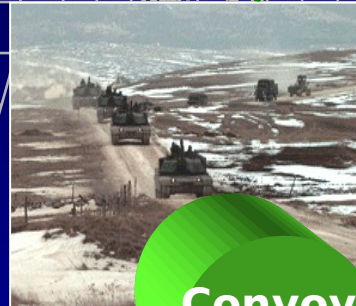
Mobility  
Automation



Movement  
Management  
Operations



Convoy  
Operations



☒ FY98 - Submit MOCS Proposal

☒ FY99 - Establish MOS

☒ FY00 - Begin Recruiting

☐ FY01 - Begin Training

☐ FY01 - Field First Warrant Officers

☐ FY18 - Promote First CW5



# Collective Training

## Battle Command Training Program (BCTP)



**Staff Seminar**

## 3rd Inf Div



**Deployment Exercise (DEPEX)**

## CINC EXERCISES

Deployment Exercises and Operations



JFCOM /  
UNIFIED ENDEAVOR

EUCOM /  
JOINT ENDEAVOR



PACOM /  
ULCHI FOCUS LENS



**National Training Center (NTC)**



**Sea Emergency Deployment Readiness Exercise (SEDRE)**



**Rock Drills**



# APS-3 Mobile Training Team



APS-3  
MTT

Program Completed



ARMY  
MATERIEL  
COMMAND

MEDICAL

• Sept 98

• Aug 98

• Aug 98

• Dec 97

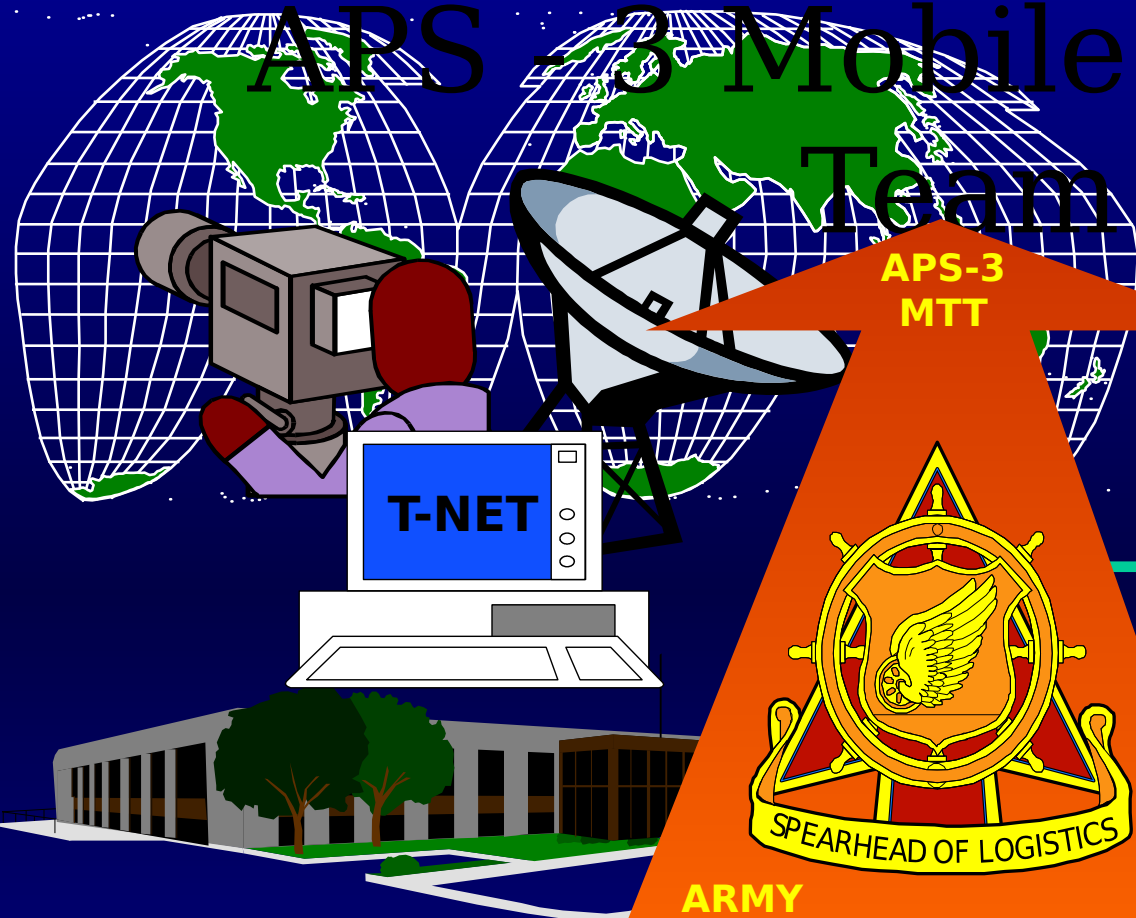
*FY 98*

*FY 97*

• Jul 97

• Apr 97

MISSION : TRAIN HEAVY BRIGADES TO DRAW PREPO AF



# Collective Training

(SEDRE)  
Combining  
SEDRE & NTC

Strategic  
Mobility

RSO &  
NTC

PORT HUNEME

AIRBORNE  
FORT  
CAMPBELL

JOINT

JACKSONVILLE

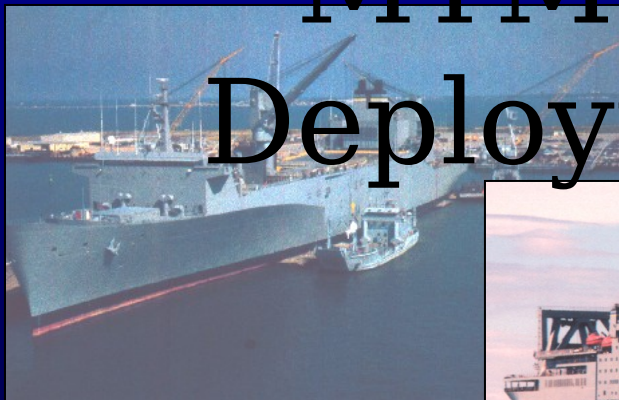
Fort  
to  
Port

FORSCOM  
Lead

Combining SEDRE & NTC Rotation:

- Better Training
- Reduced OPTEMPO
- Reduced Costs (Varies by location)

# MTMTC Warfighter Deployment Program





# CSA Deployment Excellence Award

- Recognize units and installations for outstanding deployment accomplishments which meet or exceed established deployment standards
- Capture and share innovative deployment initiatives which have improved the deployment





# DPMO Homepage



www.deploy.eustis.army.mil

TC-AIMS II

DOCTRINE

Battle Lab